

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
23 October 2003 (23.10.2003)

PCT

(10) International Publication Number  
WO 03/087346 A1

- (51) International Patent Classification<sup>7</sup>: C12N 5/00 (74) Agent: BALDWIN SHELSTON WATERS; 342 Lambton Quay, PO Box 582, 6004 Wellington (NZ).
- (21) International Application Number: PCT/NZ03/00059
- (22) International Filing Date: 7 April 2003 (07.04.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
518163 5 April 2002 (05.04.2002) NZ
- (71) Applicant (for all designated States except US): KIWI IN-GENUITY LIMITED [NZ/NZ]; 47 Gosford Drive, Howick, Auckland (NZ).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BLAKE, Deborah, Adella [NZ/NZ]; 38 Ara Kotinga Road, Manurewa Road, Auckland (NZ). CARTER, Nicola, Lewell [NZ/NZ]; 34 Glendowie Road, Glendowie, Auckland (NZ). HENRY, Stephen, Michael [NZ/NZ]; 47 Gosford Drive, Howick, Auckland (NZ).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: EMBRYO MODIFICATION AND IMPLANTATION

(57) **Abstract:** The present invention relates to constructs and methods used to enhance the attachment and implantation of an embryo. It is shown that modified glycolipids and glycolipid-attachment molecule constructs can be used to modify embryos, or localised to target tissues, to enhance interaction between the embryo and the target tissue, (typically the endometrium). The invention may advantageously be used to enhance implantation of embryos in the uterus, for example, in IVF treatments.

WO 03/087346 A1